



General

Guideline Title

Quality improvement in nursing homes.

Bibliographic Source(s)

Dyck M, Schwindenhammer T. Quality improvement in nursing homes. Iowa City (IA): University of Iowa College of Nursing, John A. Hartford Foundation Center of Geriatric Nursing Excellence; 2012 Aug. 62 p.

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

Definitions for the grades of evidence (A1-D) are provided at the end of the "Major Recommendations" field.

Overview

With the passage of the Affordable Care Act (ACA) in March 2010, nursing homes must further develop their quality improvement program to include both quality assurance and performance improvement (QAPI) elements. The five elements of QAPI are:

- Element 1: Design and Scope
- Element 2: Governance and Leadership
- Element 3: Feedback, Data Systems and Monitoring
- Element 4: Performance Improvement Projects (PIPs)
- Element 5: Systematic Analysis and Systematic Action

Further discussion of each QAPI element is integrated into the protocol.

Steps to Implement Quality Improvement

1. Determine QAPI Element 1: Design and Scope.

NOTE: The QAPI program must be ongoing and comprehensive. Its purpose is safety with high quality clinical interventions together with autonomy and choice in the residents' daily lives. The QAPI program is based on the best available evidence.

- a. Develop a quality philosophy based on the organization's mission statement to provide clear direction (Evidence grade = C1).
- b. Develop a written QAPI plan that includes clinical care, quality of life, resident choice, and care transitions involving all services and

departments.

- c. Determine standards of care to be followed for care given in the facility.

NOTE: Use of standardized procedures and audits within nursing homes are feasible and associated with higher-quality of care (Evidence grade = D).

- d. Determine guidelines for quality management.

NOTE: Guidelines need to include leadership involvement, customer input, teamwork, and a focus on outcomes and effectiveness of care (Evidence grade = D).

- e. Place residents and family at the center of the QAPI plan because quality improvement should be resident and family focused (Evidence grade = D).

2. Determine quality improvement program framework (Evidence grade = C1).

- a. Omnibus Budget Reconciliation Act of 1987 (OBRA) identifies the quality committee as the Quality Assurance and Assessment (QAA) Committee.
- b. All committees should report to the QAA Committee, including Pharmacy and Therapeutics Committee, Infection Control Committee, Ethics Committee, Safety Committee, and any other facility specific committees (Evidence grade = D).
- c. Department quality committees should report to the QAA Committee (Evidence grade = D).
- d. Determine reporting mechanism to the board of directors (Evidence grade = D).
- e. Establish key quality measures (QMs) that are routinely monitored across the organization (Evidence grade = C1).
- f. Establish key departmental QMs that are routinely monitored across each department, some of which are compiled as part of the organization-wide QMs (Evidence grade = C1).

3. Determine QAA Committee structure.

- a. Chair and committee membership need to be determined.

NOTE: OBRA requires membership to include the Director of Nursing, a physician designated by the facility, and at least three other members of the facility staff. Other members can be determined by facility needs, although every department needs to be represented and at least two direct care staff members (e.g., Certified Nurse Assistant [CNA], housekeeper, laundry assistant, maintenance man) need to be on the committee.

NOTE: Each department head is accountable for quality in his/her own department. The Administrator is ultimately accountable for quality in the facility.

- b. A meeting schedule needs to be established.

- c. Determine committee process, including meeting format and agenda setting (Evidence grade = D).

4. Implement teamwork concepts, since positive outcomes are more likely with team initiatives (Evidence grade = C1).

- a. Stages of teamwork include:

1. Forming – The first stage of group development involves reducing ambiguity and determining acceptable behaviors.
2. Storming – During this second stage of development, there is intergroup conflict. The goal during "storming" is resolving conflict and focusing on the assigned task.
3. Norming – The third stage involves acceptance of the group members and creation of new boundaries for group behaviors. Group cohesion develops during this stage.
4. Performing – The fourth stage is characterized by mutual problem solving to meet the goals of the group (Evidence grade = D).
5. Adjourning – The fifth stage is characterized by sharing improved processes with others

- b. Every team/staff member is important (Evidence grade = C1). Individual team members can benefit from team participation as shown by:

1. Continued learning
2. Acquisition of specialized knowledge and skills
3. Impact of new knowledge on job performance (Evidence grade = C1)

- c. Staff members who have direct knowledge of the problem and who are directly impacted by the project are particularly helpful members (Evidence grade = C1).

5. Develop a relationship with a gerontological advanced practice nurse for clinical consultation (Evidence grade = C1).

- a. Resident outcomes in nursing homes receiving intensive support from an advanced practice nurse show significant improvement, while homes only receiving quality data without consultation do not show significant improvement in resident outcomes (Evidence grade = C1).
- b. Residents in nursing homes in which care is planned by advanced practice nurses using evidence-based protocols show better outcomes than nursing homes without advanced practice nurses (e.g., Clinical Nurse Specialist, Nurse Practitioner) (Evidence grade = C1).

c. Tips for working with a consultant include:

1. Identify problems
2. Specify specific goals
3. Share workplace problems
4. Avoid time wasting situations, e.g., socialization, orientation
5. Involve the consultant in meetings
6. Don't assume that the consultant understands your business
7. Ask questions
8. Write down ideas and suggestions (Evidence grade = D)

6. Implement QAPI Element 2: Governance and Leadership.

NOTE: Administration and/or the governing body of the nursing home is to develop and lead the QAPI program. Leadership is to include input from facility staff, residents, and families (or resident representatives).

a. Provide organizational support for the program.

Management support for the quality improvement program needs to be highly visible (Evidence grade = C1). The governing body is to work with leadership to set priorities and expectations for safety, quality, rights, choice, and respect through a balance of a culture of safety and a resident-centered culture.

b. Leadership's responsibilities for a quality improvement program include:

1. Provision of structure

NOTE: This includes the designation of a person accountable for QAPI

2. Provision of resources and resource analysis
3. Data utilization
4. Staff activity and productivity monitoring
5. Provision of funding for the program (Evidence grade = C1)
6. Leadership and facility-wide training on QAPI

c. Management needs to support changes implemented through the program (Evidence grade = C1).

d. Lack of administrative support limits or prevents success in a quality improvement program (Evidence grade = D).

7. Implement an educational program for all nursing home staff (Evidence grade = C1).

NOTE: QAPI education is required for all nursing home staff, including leadership.

a. An initial overview session needs to be developed to include:

1. Definitions of quality, the program's purpose, and implementation dates
2. Rationales for development of a quality improvement program
3. Expectations for all staff to be involved
4. Specific tasks for staff involvement (Evidence grade = C1)

b. The initial overview session needs to be incorporated into orientation for all new staff members.

c. Educational sessions for committee members with additional information regarding data collection and management, data analysis, improvement plans, committee functioning (Evidence grade = D), and change leadership (Evidence grade = D).

d. Persons collecting data will need additional specialized education (Evidence grade = D).

e. Senior management involvement in the educational program indicates management commitment to the program (Evidence grade = D).

f. All levels of staff need to understand quality improvement as everyone can make a difference in quality. However, content and language may be adjusted for different levels of staff.

Improvement/Benchmarking Plan Implementation

1. Plan for quality improvement/benchmarking, both internal and external (Evidence grade = D).

a. Define process.

b. Determine data elements.

NOTE: For nursing homes some benchmark measurements are already determined by the structure of the Minimum Data Set (MDS) and QMs.

c. Determine standards and measurements.

NOTE: Some standards are set by legislation and can also be used as data elements. As an example, quarterly fire drills can be monitored and analyzed for compliance with regulatory standards and facility policy.

- d. Target overall quality improvement process and specific problems.
 - e. Develop a data collection plan. See section on data collection and management.
 - f. Select internal departments and/or external organizations for comparisons.
2. Collect and analyze data (Evidence grade = D).
 - a. Collect data using QMs, satisfaction surveys, interviews, and other tools determined by the Quality Assurance and Assessment Committee.
 - b. Conduct regular meetings to create opportunities for staff to discuss issues related to quality of care (Evidence grade = D).
 - c. Use root cause analysis to determine causes of quality issues.
 - d. Analyze data using tools described under data collection, management, and analysis.
 3. Study data (Evidence grade = D).
 - a. Analyze information from data.
 - b. Identify areas of good performance and reinforce practices that meet standards.
 - c. Identify areas for improvement and develop a change plan for the process to be changed.
 - d. Review the literature to determine research-based evidence for the practice.
 - e. Visit or meet with other facilities and/or organizations for external benchmarking.
 - f. Follow steps under data collection and management and data analysis for specific details of the administrative guideline.
 4. Improve the process (Evidence grade = C).
 - a. Implement changes.
 - b. Evaluate the changes shortly after implementation of the improvement plan (Evidence grade = D).
 - c. Determine times to monitor the problem at routine intervals to ensure that changes continue to be practiced and are effective (Evidence Grade = D).
 - d. Follow steps under data analysis for policy, procedure, and protocol revisions, orientation revisions, and data dissemination.

Implementation of Consumer Satisfaction Process

1. Identify a committee to implement a consumer satisfaction process with both residents and families (Evidence grade = D). The committee should report to the Quality Assurance and Assessment Committee (Evidence grade = D).
2. Obtain administrative support of the Consumer Satisfaction Process (Evidence grade = C).
3. Prepare staff as satisfaction surveys may be viewed as a threat by staff (Evidence grade = D).
4. Decide on the tool to be used. Use of previously developed and tested tools is recommended due to the resources and time required for tool development and testing (Evidence grade = C).
 - a. A number of different tools are available in the literature. Some tools are in the public domain, while others must be purchased and licensed for use. All tools require resident interviews.
 - b. Possible tools include:
 1. My InnerView is copyrighted. It is a survey instrument to assess resident, family and employee satisfaction of skilled nursing facilities. It has the largest database on resident, family and employee satisfaction in nursing facilities and offers organizational assessment that focuses on corporate culture, leadership and culture change. It is designed to assist quality management and quality indicators (QIs) and practices. Further information can be obtained at <http://www.dhcs.ca.gov> .
 2. Satisfaction with Nursing Home Instrument (SNHI) is available in the public domain for use with long-term nursing home residents (Evidence grade = B).
 3. Resident Satisfaction Interview (RSI) is copyrighted. Interviewers must be trained and licensed to use it. The advantage of using a licensed tool is the service provided in the use of the tool, including the educational process for interviewers (Evidence grade = B).
 4. Life Services Network Confidence Satisfaction Surveys has surveys for a variety of consumers, including short-stay and long-stay residents, and families. Information can be found at <http://www.confidence-surveys.com> .
5. Add facility specific questions as desired (Evidence grade = D).
6. Determine administration frequency, if not specifically recommended by authors of chosen tool (Evidence grade = D).
7. Identify interviewers. Interviewers who are not staff members are preferred as residents may try to give answers that they believe staff members want to hear. Possible interviewers may include volunteers.
 - a. Educate interviewers about process and tool (Evidence grade = B).

NOTE: The interviewers' commitment is important to the success of the data collection and analysis (Evidence grade = C).
 - b. Share results with interviewers as it provides a sense of project completion and satisfaction (Evidence grade = C).
8. Select residents to complete the resident survey/interview.

- a. MDS items can be used in several different ways. The simplest method, although only tested with incontinent residents, used MDS 2.0 Section B Cognitive Patterns, Item 3 Memory/Recall Ability. Sum the total number of check marks. Include all residents who score at least 2 points (Evidence grade = B).
 - b. The use of a protocol that requires interviewers to approach residents three times on three separate occasions is recommended prior to determining that residents are unable to participate (Evidence grade = C).
 - c. Screening Interview Schedule (SIS) consists of seven yes/no questions. If the resident does not respond to these questions, then the interview is discontinued (Evidence grade = C).
9. Develop a family survey, if the above family survey is not useful for the facility.
 10. Select family members or significant others to complete a family survey (Evidence grade = D).
 11. Print tool using Courier 14 to 16 point font for older adults (Evidence grade = B; C).
 12. Conduct survey (Evidence grade = D).
 - a. Key factors for a successful interview include:
 1. Providing privacy
 2. Finding a quiet place
 3. Positioning resident facing away from glare
 4. Providing hearing amplification, if necessary
 5. Using short, simple questions
 6. Using a selection of words that are easy to hear
 7. Redirecting resident's attention, if necessary
 8. Allowing plenty of time for residents to answer (Evidence grade = C1)
 13. Analyze data, including comments from surveys. See details under section on data analysis.
 14. Disseminate findings. See details under section on data reporting/dissemination.

Implementation of Data Collection and Management

1. Implement QAPI Element 3: Feedback, Data Systems, and Monitoring.
NOTE: The facility is required to implement systems to monitor care and services using data from multiple sources.
2. Implement QAPI Element 4: PIPs
NOTE: The purpose of PIPs is to evaluate and improve care and/or services in an area which needs attention. A PIP provides focused attention on a specific problem, often in one area of the facility. The choice of PIPs relates to the specific type and scope of services available in the facility.
3. Educate all who will be collecting and managing data (Evidence grade = B).
 - a. Data collectors need education on:
 1. Data collection protocols
 2. Monitoring instruments
 3. Sample selection
 4. Approaching consumers (i.e., residents, families, and other staff members) (Evidence grade = D).
 - b. New data collectors need to practice collecting data simultaneously with experienced data collectors until there is at least an 85% agreement rate between the two data collectors (Evidence grade = D).
 - c. Many staff members can assist in data collection. Staff members who have direct knowledge of the problem and who are directly impacted by the project are particularly helpful (Evidence grade = D).
 - d. Data managers need education on:
 1. Computer software availability and applicability
 2. Use of available computer software to collect and manage data and disseminate information
 3. Computer networks and database usage (Evidence grade = C)
4. Determine core QIs for each department.
5. Choose data elements that will access the requisite data for the core QIs using current sources of readily accessible data as part of the Quality Improvement Program, if possible.
NOTE: Using currently available resources increases efficiency and productivity and decreases expenses (Evidence grade = D).

NOTE: Some examples of available data include:

1. Assessment tools, including MDS
2. QM reports

3. Care plans
4. Staff schedules
5. Adverse event reports and action plans to prevent recurrences
6. Medication error reports
7. Billing records
8. Human resources records

6. Review current data collection tools to determine if they provide the necessary data for the QI (Evidence grade = D).
7. Determine volume and frequency of data to be collected.
 - a. Volume varies depending on type of study (e.g., query review, sentinel event review). Size and complexity of databases increase quickly affecting data management (Evidence grade = C).
 - b. Suggested frequency guidelines include:
 1. Routine review – data that are routinely collected for other purposes and can be integrated into the data collection
 2. Query review – completed when a variance outside established thresholds occurs
 3. Sentinel event – completed for every event (Evidence grade = D).
 - c. Some data are routinely collected for other purposes and can be used for quality monitoring (Evidence grade = D).
 - d. Some data are collected only for a particular quality improvement study.
8. Identify an individual to be accountable for data management (Evidence grade = D).
9. Use a computer for data management to ensure the quality of results and to meet regulatory guidelines (Evidence grade = D).

Implementation of Data Analysis

1. Educate all who will be analyzing data regarding:
 - a. The quality improvement process (Evidence Grade = D)
 - b. Use of QIs, including (Evidence grade = D):
 1. Overview (Evidence grade = B)
 2. Calculation of QIs
 - c. Consumer satisfaction process (Evidence grade = C)
 - d. Quality improvement tools. Examples include:
 1. Facility maps that provide a geographic distribution of cases (Evidence grade = D)
 2. Flowcharts that provide an overview of the process being examined (Evidence grade = D)
 3. Pareto diagrams, a type of bar graph, showing the frequency of events or situation being studied (Evidence grade = D)
 4. Run charts, a type of graph, showing a single item's performance over time (Evidence grade = D).
2. Access facility QIs on a regular basis, at least monthly.
 - a. See either the Center for Health Systems Research & Analysis website or *MDS 3.0 User's Manual* for details on calculations. To assess go to www.nursinghomehelp.org or www.agingmo.com .
3. Implement QAPI Element 5: Systematic Analysis and Systemic Action.

NOTE: Facilities are required to develop policies and procedures and demonstrate proficiency in the use of RCA.
4. Use RCA in analysis of PIPs.
5. Use quality improvement tools to assist in the analysis as needed (Evidence grade = C).
6. Review facility QMs at least monthly
 - a. Evaluate QMs for accurate MDS coding (Evidence grade = D).
 1. Correct coding can mean the difference between good and poor QM scores.
 2. Correct coding can mean the difference between accurate and inaccurate reimbursement rates for your residents and facility.
 3. Ask your consultant about coding questions.
 - b. Ask questions about QM results (Evidence grade = C).
 1. Has the QM been thoroughly assessed?
 2. Was the MDS accurately coded?
 3. Was the problem included in the resident's care plan?
 4. How was the decision made to include or not include the problem in the care plan?
 5. Is the plan specific to the resident?
 6. Is the plan written clearly and succinctly?
 7. Are the staff members familiar with the care plan and following it as developed?
 8. Is the care plan being evaluated and revised according to the resident's needs?

9. Is this QM or report even a concern?
10. Are resident, staff, or system variables possible causes?
11. Is the problem focused on one resident or is it a facility-wide problem?
- c. Review resident specific problem conditions and determine appropriate changes to the care plan (Evidence grade = C1).
 1. Ask questions. See Section 3.b above.
 2. Check with consultant to identify appropriate interventions that positively influence a resident's outcome (Evidence grade = C).
NOTE: Some appropriate interventions may positively influence a resident's outcome, but may appear to have a negative effect on the QI (Evidence grade = C).
7. Review facility systems for resident care for common resident problems, such as falls, pressure ulcers, weight loss, and incontinence (Evidence grade = C).
 - a. Review current policies and procedures.
 - b. Interview staff about current practices.
 - c. Observe care delivery
 - d. Review current standards and practice guidelines.
 - e. Use published audit tools (or develop own tools, if none available) to conduct in-depth reviews of facility systems related to specific QMs.
NOTE: In developing audit tools, remember to write audit criterion with standards met as yes and deficiencies as a no. In this way, it is easy to determine problem areas with a quick glance.
8. Review the results of data collection and compare with current standards of care, including, but not limited to QMs, consumer satisfaction data, and adverse event data (Evidence grade = C).
9. Discuss the changes that will be necessary to solve problems associated with the problem/situation under review in the interdisciplinary Quality Assurance and Assessment Committee (Evidence grade = D).
10. Develop an improvement plan (Evidence grade = C).
11. Implement the improvement plan (Evidence grade = C).
 - a. Review, update, and revise policy, procedure, and protocol manuals, so that they are consistent with implemented changes (Evidence grade = C).
 - b. Disseminate quality improvement study results, revised policy(ies), revised procedure(s), and revised protocol(s) to supervisory and direct care staff (Evidence grade = C).

Dissemination Process

1. Disseminate quality improvement study results, revised policy(ies), revised procedure(s), and revised protocol(s) to supervisory and direct care staff (Evidence grade = C).
 - a. Dissemination of results to all staff members may cause awareness of the QI program and constant evaluation of staff's work quality (Evidence grade = C).
 - b. Dissemination may occur through:
 1. Staff meetings (Evidence grade = C)
 2. Resident council meetings (Evidence grade = C)
 3. Family council meetings (Evidence grade = C)
 4. Videotape followed by dialogue (Evidence grade = C)
 5. Bulletin board postings
 6. Newsletters
 7. Other ways determined by the facility
2. Revise orientation materials to include policy, procedure, and protocol changes (Evidence grade = C).
3. Evaluate the changes shortly after implementation of the improvement plan (Evidence grade = C).
4. Determine times to monitor the problem at routine intervals to ensure that changes continue to be practiced and are effective (Evidence grade = C).

Definitions:

Scheme for Grading the Strength & Consistency of Evidence in the Guideline

A1 = Evidence from well-designed meta-analysis or well-done systematic review with results that consistently support a specific action (e.g., assessment), intervention, or treatment

A2 = Evidence from one or more randomized controlled trials with consistent results

B1 = Evidence from high quality evidence-based practice guideline

B2 = Evidence from quasi experimental trials with consistent results

C1 = Evidence from observational studies with consistent results (e.g., correlational, descriptive studies)

C2 = Evidence from observational studies or controlled trials with inconsistent results

D = Evidence from expert opinion, multiple case reports, or national consensus reports

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Any condition requiring long-term care

Guideline Category

Management

Prevention

Risk Assessment

Clinical Specialty

Geriatrics

Nursing

Preventive Medicine

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Dietitians

Nurses

Social Workers

Guideline Objective(s)

To provide quality improvement knowledge and strategies for nursing homes

Target Population

Nursing home patients

Interventions and Practices Considered

1. Implementation of quality improvement
 - Determination of design and scope of improvement plan
 - Determination of framework
 - Implementation of teamwork concepts
 - Development of relationships for clinical consultation
 - Implementation of effective governance and leadership, including input from facility staff, residents and families
 - Implementation of educational program for all nursing home staff
2. Implementation of improvement/benchmarking plan
 - Development of a plan for benchmarking
 - Collection and analysis of data
 - Improvement of the process
3. Implementation of consumer satisfaction process
 - Preparation of staff
 - Deciding on and implementation of a tool
 - Selection of interviewers and residents/family members
 - Conducting the survey
 - Analysis of the data
4. Implementation of data collection and management
 - Monitoring of care and services using data from multiple sources
 - Implementation of performance improvement projects (PIPs)
 - Education of all who are collecting and managing data
 - Determination of core quality indicators (QIs) for each department
 - Review of current data collection tools
 - Determination of volume and frequency of data
5. Implementation of data analysis
 - Education of all who are analyzing data
 - Use of root cause analysis (RCA) in analysis of PIPs
 - Use of quality improvement tools to assist in analysis
 - Review of facility quality measures (QMs)
 - Review of data collection results
 - Discussion of changes needed
 - Development and implementation of an improvement plan

Major Outcomes Considered

- Performance standards
- Resident or consumer satisfaction
- Quality of life
- Mortality

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Search Strategy

A search was conducted using the terms quality improvement and nursing homes. The search included the following databases: MEDLINE, Cumulative Index to Nursing and Applied Health Literature (CINAHL) and Cochrane library was search for systematic reviews. An initial search was carried out from 2006 to 2011 with a total of 343 references. The search was limited to quality indicators and nursing homes with the same limitations for years and a total of 67 articles were obtained. The bibliographies of all included articles were searched for additional references. A second search was conducted using the terms quality improvement and nursing homes from 2011 to 2012 using CINAHL and the last 5 years with PubMed for a total of 196 references. In addition, the Centers for Medicare and Medicaid websites were searched for current information and regulations for nursing homes.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Scheme for Grading the Strength & Consistency of Evidence in the Guideline

A1 = Evidence from well-designed meta-analysis or well-done systematic review with results that consistently support a specific action (e.g., assessment), intervention, or treatment

A2 = Evidence from one or more randomized controlled trials with consistent results

B1 = Evidence from high quality evidence-based practice guideline

B2 = Evidence from quasi experimental trials with consistent results

C1 = Evidence from observational studies with consistent results (e.g., correlational, descriptive studies)

C2 = Evidence from observational studies or controlled trials with inconsistent results

D = Evidence from expert opinion, multiple case reports, or national consensus reports

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

The practice recommendations are assigned an evidence grade based upon the type and strength of evidence from research and other literature. The grading schema used to make recommendations in this evidence-based practice guideline is available in the "Rating Scheme for the Strength of the Evidence" field.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Experts in the subject of the proposed guideline are selected by the Research Translation and Dissemination Core to examine available research and write the guideline. Authors are given guidelines for performance of the systematic review of the evidence and in critiquing and weighing the strength of evidence.

This guideline was developed from an exhaustive literature review and synthesis of current evidence on assessing heart failure in long-term care facilities. Research and other evidence, such as guidelines and standards from professional organizations, were critiqued, analyzed, and used as supporting evidence.

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Not stated

Description of Method of Guideline Validation

Not applicable

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for selected recommendations (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Quality improvement in nursing homes

Potential Harms

Not stated

Qualifying Statements

Qualifying Statements

- Nursing home quality is influenced by federal and state regulators with the history of nursing home quality woven throughout federal and state programs. Quality improvement processes are mandated by law and are used as a means to improve quality of care in nursing homes. Legally, nursing homes are required to use the research-based Resident Assessment Instrument (RAI) for assessment and care planning purposes. Quality measures have been developed based on the RAI assessment data. Since nursing homes are required to use these instruments, this administrative guideline is built on these requirements. Individuals using this administrative guideline need to acquaint themselves with the RAI, the most recent version of the *MDS 3.0 User's Manual*, which details use of the RAI, and the Five Elements of Quality Assurance and Program Improvement (QAPI).
- Nursing homes with clinical consultation from advanced practice nurses show significantly higher levels of quality than nursing homes without clinical consultants. This administrative guideline is based on the premise that nursing homes use or will use a clinical consultant to enhance their quality of care and their quality improvement program. Advanced practice nurses are increasingly present as members of the nursing home workforce. Research has shown that a relationship exists between advanced practice nurses and improved quality of care in nursing homes. Improving quality of care in nursing homes has improved resident outcomes when using advanced practice nurses either on-site or in consultation where they could effect change in clinical practice. Another way to increase quality improvement would be to develop partnerships with schools of nursing within an academic health center. These academic partnerships have given extra support and assistance to the facilities to help them in providing more education and expert resources.

Implementation of the Guideline

Description of Implementation Strategy

Evaluation of Administrative Guideline Implementation Process and Outcomes

Throughout the original guideline document, the terms process and outcome have been used to refer to indicators for the evaluation of quality of resident care. In this section, these terms will be used to evaluate the implementation process and outcomes of the implementation of this administrative guideline. In the overview, reference was made to the fact that not all quality improvement programs succeed. The purpose of this section is to guide the facility in evaluating the implementation and outcomes of a nursing home Quality Improvement Program, using this administrative guideline.

Process Indicators

Process indicators are those interpersonal and environmental factors that can facilitate the use of an administrative guideline. Process quality indicators (QIs) may help to improve quality of care.

One process factor that can be assessed with a sample of professional and nonprofessional staff is knowledge about Quality Improvement. The Quality Improvement Knowledge Assessment tests should be assessed before and following the education of staff regarding use of this administrative guideline. Two forms of the test are available. One form is for professional and nonprofessional staff, who will be involved in data collection, management, analysis, and decision making. The other form is for all staff members who are involved with the program, but do not have responsibility for the data and decision making.

The same sample of professional and nonprofessional staff with data and decision making responsibilities should also be given the Process Evaluation Monitor after the first quarter of data analysis using the administrative guideline. The purpose of this monitor is to determine staff understanding of the administrative guideline and to assess the support for carrying out the administrative guideline. Items for the administrative guideline were adapted from the standardized Gerontological Nursing Interventions Research Center (GNIRC) protocol format and a previous study of nurses' involvement on quality improvement teams.

A facility-wide process indicator that should be monitored over time is:

- Continued use of a gerontological nurse consultant either on-site or by telephone.

Outcome Indicators

Outcome indicators are those expected to change or improve from consistent use of this administrative guideline in nursing home quality improvement programs. QIs are more stringent indicators because appropriate care should reflect resident health outcomes. The core quality measures (QMs) that should be monitored over time are the CMS-required QMs plus the QIs determined by each department.

The Quality Improvement Outcomes monitor is to be used for monitoring and evaluating the usefulness of the Quality Improvement administrative guideline in improving nursing home residents' outcomes. Please adapt this outcome monitor to your facility and add outcomes you believe are important.

Implementation Tools

Audit Criteria/Indicators

Chart Documentation/Checklists/Forms

Quick Reference Guides/Physician Guides

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

End of Life Care

IOM Domain

Effectiveness

Patient-centeredness

Safety

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

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Guideline Developer(s)

University of Iowa College of Nursing, John A. Hartford Foundation Center of Geriatric Nursing Excellence - Academic Institution

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University of Iowa College of Nursing, John A. Hartford Foundation Center of Geriatric Nursing Excellence

Guideline Committee

Not stated

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available for purchase on CD-ROM through [The University of Iowa College of Nursing's John A. Hartford Center for Geriatric Excellence Web site](#) .

Print copies: Available for purchase through [The University of Iowa College of Nursing's John A. Hartford Center for Geriatric Excellence Web site](#) .

Availability of Companion Documents

The following is available:

- Quality improvement (QI) in nursing homes. Quick reference guide. Iowa City (IA): University of Iowa College of Nursing, John A. Hartford Foundation Center of Geriatric Nursing Excellence (HCGNE); 2012.

A quick reference guide accompanies the full-text guideline, which is available from the University of Iowa College of Nursing, John A. Hartford Foundation Center of Geriatric Nursing Excellence, 4118 Westlawn, Iowa City, IA 52242. For more information, please see [The University of Iowa College of Nursing, John A. Hartford Foundation Center of Geriatric Nursing Excellence Web site](#) .

The appendices to the original guideline document include a variety of implementation tools, including evaluation instruments, knowledge assessment tests, process evaluation and quality improvement monitors, and a resident selection form.

Sample audit and process indicators are also available in the original guideline document.

Patient Resources

None available

NGC Status

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